

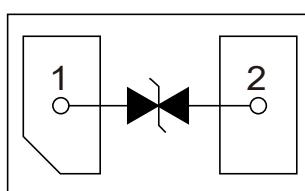
1. Description

The LESD8LL5.0C is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space is at a premium.

3. Features

- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection
- We declare that the material of product compliant with RoHS requirements and Halogen Free.
- ESD Rating of Class 3(>16kV) per Human Body Model
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

4. Pinning information



SOD-882



5. Absolute Ratings ($T_{amb}=25^{\circ}C$)

Parameter	Symbol	Value	Units
IEC61000-4-2 (ESD)		±15	kV
air discharge		±8	kV
contact discharge			
ESD Voltage	Per Human Body Model	16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ $T_A=25^{\circ}C$	P_D	200	mW
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	T_L	260	°C

Notes:

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5=1.0*0.75*0.62 in.



6. Electrical Characteristic ($T_A=25^\circ\text{C}$ unless otherwise noted)

Device	V_{RWM} (V)	$I_R(\mu\text{A})$ @ V_{RWM}	$V_{BR}(\text{V})$ @ I_T (Note 2)	I_T	$V_c(\text{V})$ @ $I_{PP}=1\text{A}$ (Note 3)	$V_c(\text{V})$ @ MAX I_{PP} (Note 3)	$I_{PP}(\text{A})$ (Note 3)	$P_{PK}(\text{W})$ (Note 3)	C(pF)	
	Max	Max	Min	mA	Max	Max	Max	Max	Typ	Max
LESD8LL5.0C	5	0.5	6	1	12	20	4	80	0.25	0.3

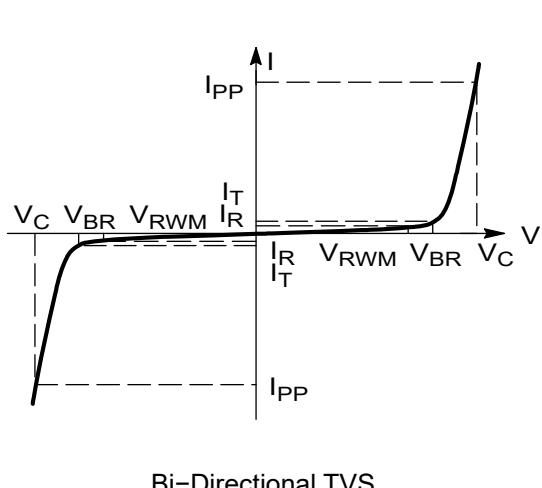
Notes:

Other voltage available upon request.

2. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .

3. Surge current waveform per Figure 1.

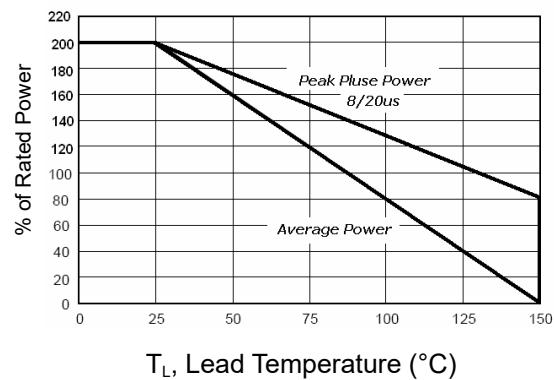
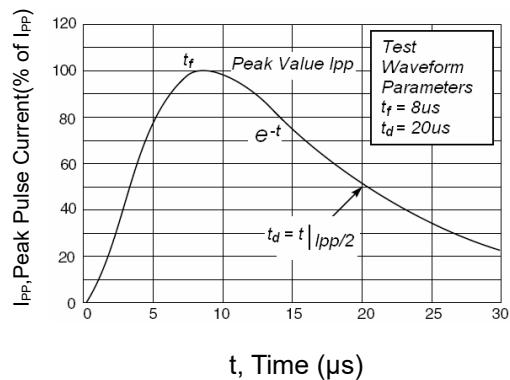
7. Electrical Parameter ($T_A=25^\circ\text{C}$ unless otherwise noted)



Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_c	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
P_{PK}	Peak Power Dissipation
C	Capacitance @ $V_R=0$ and $f=1.0\text{MHz}$

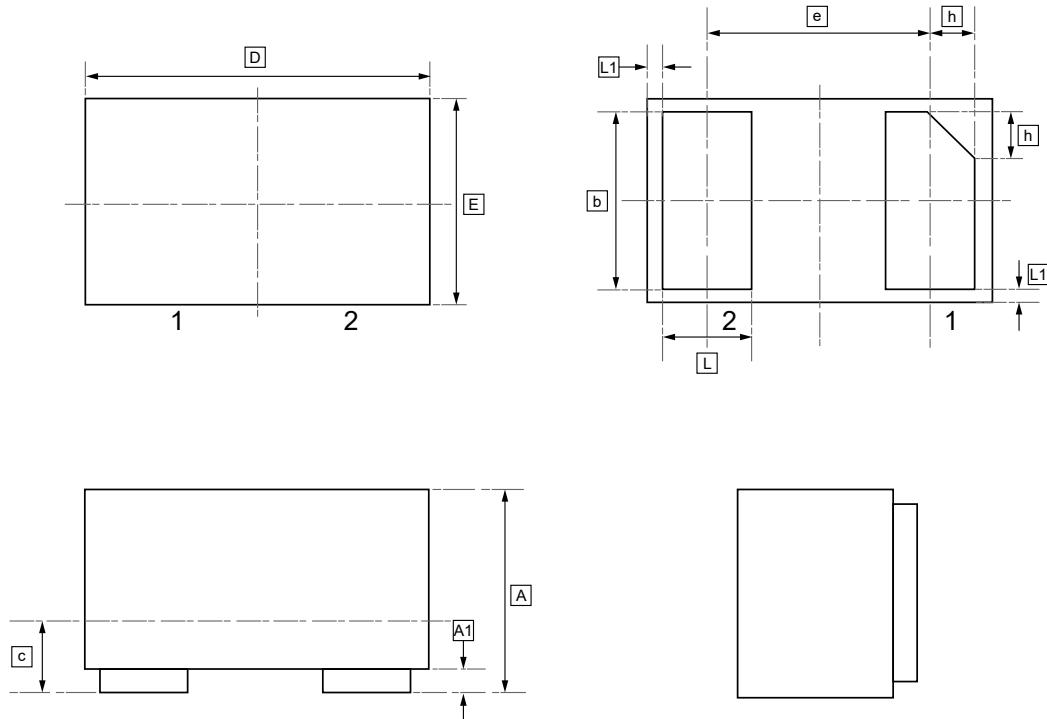


8.Typical characteristic





9.SOD-882 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	b	c	D	e	E	L	L1	h
Min	0.45	0.00	0.45	0.12	0.95	0.65	0.55	0.20	0.05	0.07
Max	0.55	0.05	0.55	0.18	1.05	BSC	0.65	0.30	REF	0.17



10.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW LESD8LL5.0CT5G	SOD-882	10000	Tape and reel



11. Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

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